

REMARKS

Claims 1-12 are pending in the application. Claims 1-4 and 6-12 were rejected under 35 U.S.C. §102(b), as described in paragraphs 9-19 of the Office Action. Claim 5 was rejected under 35 U.S.C. §103(a), as described in paragraphs 21 and 22 of the Office Action. Claim 3 was indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1 and 10-12 are the only independent claims.

Attached hereto are replacement formal drawings for Figs. 16 and 19. In particular, in S1604, of Fig. 16, the word "COORDINATE" has been placed on a single line. Further, in S1906 of Fig. 19, "RASE LINE" has been replaced to --ERASE LINE--. In light of the replacement formal drawings, Applicants respectfully request that the objections to the drawings be withdrawn.

The specification has been amended to place the application in better U.S. form. Each of claims 1 and 10-12 have been amended to require the input handwritten character string to be in the character string input area and to require the character string input area to be composed of a single frame.

Applicants acknowledge the discussion in paragraphs 6 and 7 of the Office Action. However, Applicants respectfully submit that claims 1-12 cannot be "rejected by any prior art reference capable of being programed to perform, e.g. a coordinate string detection, input completion judgement, and segmentation recognition," unless the Examiner anticipates the claims or establishes a *prima facie* case of obviousness within the meaning of 35 U.S.C. § 103. More specifically, if a single reference fails to disclose each limitation in the claimed invention then the reference fails to anticipate the claimed invention within the meaning of 35 U.S.C. § 102. Further, the mere fact that a reference can be combined or modified does not render the result in combination obvious within the meaning of 35 U.S.C. § 103, unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990). Nevertheless, in order to expedite prosecution without narrowing the scope of the claims as originally presented, the phrase "operable to" has been removed from each of claims 1-10 as suggested by the Examiner.

The remainder of the amendments to the claims generally place the claims in better U.S. form without narrowing the scope of the claims as originally presented.

It is respectfully submitted that claims 1-12 are patentable over the prior art of record, for the following reasons.

It is noted on pages 2 and 3 of the Office Action that, prior to the present invention, it had been necessary to have a plurality of character string input areas which together take up a large amount of space. Because the present invention has a character string input area with a single frame, the character string input area of the present invention is more compact.

Independent claim 1 is drawn to a handwritten character recognition apparatus comprising, *inter alia*, a coordinate string detection unit, an input completion judgment unit and a segmentation recognition unit. Independent claim 10 is drawn to a handwritten character recognition apparatus comprising, *inter alia*, a coordinate string detection unit, a display unit, a first line segment erasing unit, an input completion judgment unit, a second line segment erasing unit, and a segmentation recognition unit. The coordinate string detection unit in each of independent claims 1 and 10 is required to detect “a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, **the character string input area being composed of a single frame**”.

Independent claim 11 is drawn to a program including apparatus readable instructions capable of instructing a handwritten character recognition apparatus to detect, judge and segment. Independent claim 12 on the other hand, is drawn to a computer-readable recording medium having recorded thereon, apparatus readable instructions capable of instructing a handwritten character recognition apparatus to detect, judge and segment. More specifically, the “detect” in each of independent claims 11 and 12 is required to detect “a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, **the character string input area being composed of a single frame**”.

It is respectfully submitted that Neither Kawamura et al. (Kawamura) nor Kamei, either singly or in combination, teaches the above-identified limitations.

The writing input area 33 of Kawamura is divided into a least two character string writing frames 331-1 and 331-2. When the stroke storing section 16 of Kawamura stores, as unrecognized stroke data, a character string already written in the writing area 331-2 when a character string is written in the writing area 331-1, the character string recognition part 13 performs character string recognition processing. The processing activation controlling part 12 judges which of the writing frames 331-1 and 331-2 of the character string was written.

The present invention does not require a structure for judging which of the writing frames the character string has been written and therefore does not require such a judgment. More specifically, the present invention does not require a structure for judging which of the writing frames a character string has been written **because the character string input area of the present invention has a single frame.**

Accordingly, Kawamura fails to teach a coordinate string detection unit as required in independent claims 1 and 10.

Logically Kawamura additionally fails to teach an input completion judgment unit that judges, when a first coordinate of one of the strokes is detected in a first area which is at a side of **the character string input area** where writing of the handwritten character string starts, whether an input of an immediately preceding handwritten character string is complete, as required in independent claim 1. More specifically, neither one of the writing frames in Kawamura judges two separate handwritten character strings in a single frame. Further, Kawamura fails to include a segmentation recognition unit that segments, when the input completion detection unit judges the input to be complete, stroke strings for each character from all of the strokes of the immediately preceding handwritten character string, recognizes each character, and outputs a character string which is a recognition result.

Because Kawamura fails to teach the coordinate string detection unit of independent claim 10, is additionally respectfully submitted Kawamura fails to teach the first line segment erasing unit and input completion judgement unit, a second line segment erasing unit and a segmentation recognition unit, as required in independent claim 10.

For reasons similar to those discussed above with respect to claim 1, it is respectfully submitted that Kawamura fails to teach the program of claim 11 for the computer readable recording medium of claim 12. More specifically, Kawamura fails to teach detecting a coordinate string of each stroke that makes up an initial handwritten character string in **the character string input area, wherein the character string input area is composed of a single frame**, as required in each of independent claims 11 and 12.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the foregoing, it is clear that Kawamura does not anticipate claims 1 and 10-12.

Furthermore, since claims 2-9 are dependent upon claim 1, and therefore include all the limitations thereof, Applicants submit that claims 2-9 additionally are not anticipated by Kawamura, and request that the rejection of claims 1-4 and 6-12 under 35 U.S.C. § 102(b) be withdrawn.

It is respectfully submitted that Kamei fails to teach the shortcoming of Kawamura such that a combination of the teachings of Kawamura in view of Kamei would teach that which is required in independent claims 1 and 10-12.

As discussed in paragraph 22 of the Office Action, Kamei is relied upon for allegedly teaching “a judgment time setting unit operable to receive a setting of a predetermined time according to a speed of input of handwriting of the user”.

While not admitting to the alleged teachings of Kamei, it is respectfully submitted that Kamei fails to teach or suggest: a coordinate string detection unit that detects a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, the character string input area being composed of a single frame, as required in each of independent claims 1 and 10; a program including apparatus readable instructions capable of instructing a handwritten character recognition apparatus to detect a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, the character string input area being composed of a single frame, as required in independent claim 11; or a medium having recorded thereon, apparatus readable instructions capable of instructing a handwritten character

recognition apparatus to detect a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, the character string input area being composed of a single frame, as required in independent claim 12.

As neither Kawamura or Kamei teaches or suggests: a coordinate string detection unit that detects a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, the character string input area being composed of a single frame, as required in each of independent claims 1 and 10; a program including apparatus readable instructions capable of instructing a handwritten character recognition apparatus to detect a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, the character string input area being composed of a single frame, as required in independent claim 11; or a medium having recorded thereon, apparatus readable instructions capable of instructing a handwritten character recognition apparatus to detect a coordinate string of each stroke that makes up an input handwritten character string in the character string input area, the character string input area being composed of a single frame, as required in independent claim 12, it is respectfully submitted that a combination of the teachings of Kawamura in view of Kamei additionally fails to teach that which is required in independent claims 1 and 10-12.

In light of the above discussion, it is respectfully submitted that claims 1 and 10-12 are patentable over the combination of Kawamura in view of Kamei within the meaning of 35 U.S.C. § 103. Further, as claims 2-9 are dependent upon claim 1, and therefore include all of the limitations thereof, it is additionally respectfully submitted that claims 2-9 are patentable over the combination of Kawamura in view of Kamei within the meaning of 35 U.S.C. § 103.

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Respectfully submitted,

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